

REMARKS

In light of the following remarks, reexamination and reconsideration of the subject application are respectfully requested.

Claims 21-50 have been indicated by the Examiner as being in this application. This is not correct. In the Amendment filed April 9, 2004, Claims 1-20, 23 and 24 were canceled. Thus, Claims 21, 22 and 25-50 remain under consideration and stand as previously presented.

It is once again requested that the Examiner acknowledge the claim for foreign priority and receipt of the certified copy in grandparent Appln. No. 09/051,199, as well as the claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. This application is a continuation of Appln. No. 09/505,874, which is a divisional of Appln. No. 09/051,199, which is the U.S. national phase of PCT/FR96/01532 and claims the priority of FR95/11951, filed October 5, 1995. The domestic priorities are claimed in the first paragraph of the instant specification as filed. The foreign priority is claimed in part 11 of the Request for Filing Continuation Application filed herein on February 20, 2002.

There are presently four independent claims in this application, Claims 21, 22, 25 and 26. All other claims depend directly or indirectly from these four claims, all of which are process/method of use claims. Claim 21 is drawn to a process for the control of fungi which are phytopathogenic towards crops, said process comprising applying to crops a synergistic fungicidally effective non-phytotoxic amount of a compound A which is (i) methyl (E)-methoxyimino[α -(o-tolyloxy)-o-tolyl]acetate (BAS490F) or (ii) N-methyl-(E)-methoxyimino [2-(2,5-dimethylphenoxyethyl)phenyl]acetamide (ICIA5504), and a compound B which is

iprodione, the A/B ratio by weight being between 0.02 and 5, compounds A and B being the only fungicidally active compounds applied, the synergistic fungicidally effective non-phytotoxic amount of A and B being applied to said crops at a dose rate of between 150 and 1500 g/ha. Claim 22 differs from Claim 21 only in that Claim 22 recites a dose rate of between 400 and 1000 g/ha being applied to the crops. Claim 25 differs from Claim 21 in that Claim 25 is drawn to the control of fungi phytopathogenic towards lawns, in that application is made to lawns and in that a dose rate of between 1100 and 7000 g/ha is applied to the lawns. Claim 26 differs from Claim 25 only in that Claim 26 recites a dose rate of between 2250 and 5000 g/ha being applied to the lawns. The dependent claims are variously limited to employing a specific compound A or a narrower A/B ratio by weight, or to application to the aerial parts of the crops or lawns.

All of Claims 21, 22 and 25-50 were previously considered allowable by the Examiner; see the Interview Summary dated February 19, 2004. However, in the June 3, 2004 Official Action, the Examiner rejected all of the present claims as anticipated by Oguri United States Patent No. 6,518,304 B1. Applicant submits that this rejection is unjustified, that the previous assessment by the Examiner of Claims 21, 22 and 25-50 as allowable was correct; and that the anticipation rejection should be withdrawn and Claims 21, 22 and 25-50 allowed.

Oguri United States Patent No. 6,518,304 B1 was previously applied under 35 U.S.C. § 102(e) against composition claims which are no longer being prosecuted herein. It was never before cited against the process/method of use claims.

Oguri discloses mixtures of a compound of his formula (I) with at least one compound (b) selected from a long list of classes of fungicidal compounds. This list

comprises thirteen families of fungicide compounds among which thirteen sub-families are cited. Iprodione is cited in that list of compounds as being part of the N-(3,5-dichlorophenyl)imide family. Procymidone and vinclozolin are also cited. Seven compounds of formula (I) are specifically disclosed, among which are included SSF-129 and BAS490F as compounds (Ia) and (Ie).

Formulation Examples 7 to 9 (column 8, lines 36-60) of Oguri disclose different types of formulations for possible mixtures of compounds (Ia), (Ib), (Ic), (Id), (Ie), (If) or (Ig) with procymidone, vinclozolin or iprodione. Nevertheless, these examples remain very general and none of them mentions a specific combination of a compound of formula (Ia) with iprodione or a specific combination of a compound of formula (Ie) with iprodione. These examples are a generic disclosure of 21 potential mixtures of compounds. They do not specifically disclose mixtures applied in the processes of the present application.

Furthermore, there is nothing in the cited document which would lead one of ordinary skill to select these two specific mixtures from the list of 21 potential mixtures in Examples 7 to 9 for application herein. This is not a haphazard selection. Indeed, data already submitted herein shows a synergistic effect for the two mixtures covered by the instant application. Such a synergistic effect is not even mentioned in the Oguri patent. A further copy of the data, which was submitted on August 9, 2002 together with a Preliminary Amendment, is attached. The Examiner was asked to notify applicant's counsel if the data needed to be submitted in declaration form, but no such indication has been given as of the present. The Examiner is asked once again to notify the undersigned if he requires that this data be submitted in the

form of a 37 C.F.R. § 1.132 declaration, so that such a declaration can be prepared if required.

Oguri also discloses the use of its many mixtures/formulations to combat fungi at a dose rate of from 0.001 g to 1,000 g, preferably from 0.1 g to 100 g, per are. These amounts convert to a dosage rate of from 0.1 to 100,000 g/ha, preferably from 10 to 10,000 g/ha. Thus, in Oguri's broad range, the highest value in the range is one million times larger than the lowest value. Even in Oguri's preferred range, the highest value in the range is one thousand times the lowest value.

Applicant's dosage range for crops in Claim 21 is from 150 to 1500 g/ha; here, the highest value is 10 times the lowest value in the range. Applicant's preferred dosage range for crops, which is specified in Claim 22, is from 400 to 1000 g/ha; here the highest value is only 2.5 times the lowest value in the range.

Applicant's dosage range for lawns in Claim 25 is from 1100 to 7000 g/ha; thus, the highest value is about 6.36 times the lowest value. Applicants' preferred dosage range for lawns, which is specified in Claim 26, is from 2250 to 5000 g/ha; thus, the highest value is only about 2.22 times the lowest value in the range.

Oguri's extremely broad ranges do not anticipate applicant's narrow ranges. Applicant's narrow ranges are a material element of their claims. To constitute anticipation, all material elements of a claim must be formed in one prior art source; *In re Marshall* (CCPA 1978) 577 F2d 301, 198 USPQ 344; *In re Kalm* (CCPA 1967) 378 F2d 959, 154 USPQ 10. Oguri discloses only very, very broad ranges; he does not teach or suggest applicant's narrow ranges. While a very narrow prior art genus sometimes can be considered anticipation of a narrower genus or of a species, this is never true when the prior art document teaches only a broad genus, as Oguri does

here. The 35 U.S.C. § 102(e) rejection is improper. The question is one of obviousness, not one of anticipation.

We are here in the presence of a “double selection”:

- (1) a selection of the mixtures to be used; and
- (2) a selection of a specific application rate range on which the selected mixtures have to be used.

This double selection is unexpected. First, as noted earlier above, applicant has provided data showing a synergistic effect for the mixtures specified in applicant's claims; such a synergistic effect is neither disclosed nor suggested by Oguri. Oguri does not provide any biological example showing the fungicidal activity of the combinations applied in applicant's claimed processes/methods of use. Secondly, Oguri provides no guidance whatsoever as to application rates of the instantly applied mixtures which would be appropriate for these particular synergistic mixtures. As noted above, Oguri provides only extremely broad ranges for application. One of ordinary skill in the art would not be motivated by Oguri to select the specific mixtures applied in applicant's claims over all the other mixtures broadly covered by Oguri and then to expect them to be synergistic and useful in a very specific narrow range within Oguri's incredibly broad dose ranges. This would imply a “double selection” which cannot be considered as anticipated or obvious from Oguri and is certainly not the routine experimentation referred to by the Examiner. Indeed, the Examiner's position is unsupported by the art of record. And specifically regarding the application rate and the Examiner's statement that it is very possible the optimum application rate would have fallen at a point where the prior art and present ranges overlap, applicant points out the following: First, that something very

possible does not rise to the level of the expectation of success required to support obviousness; and secondly, that the Examiner is using a material feature of applicant's own invention, namely, his application rates, which were unknown in the prior art (as was the synergism of the mixtures applied) and with perfect 20-20 hindsight analysis noting that applicants' very narrow ranges of application rates fall somewhere within the incredibly broad ranges in the prior art. It is in fact difficult to imagine how any appropriate application rates could fall outside Oguri's ranges! On the other hand, virtually countless narrow application ranges exist within Oguri's broad ranges. Clearly, there is nothing in Oguri's broad ranges which leads one of ordinary skill to select applicant's narrow ranges for application of applicant's specific synergistic mixtures.

In view of the foregoing, it is submitted that the present claims are neither anticipated by nor obvious from the cited reference. Withdrawal of the record rejection and allowance of all of the claims are believed to be next in order and are earnestly solicited.

Respectfully submitted,

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Date: September 3, 2004

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Example A : Synergistic *In vitro* test on *Alternaria brassicae* :

A solution of each active ingredient to be tested, at a concentration of 25 g/l, is prepared by solving the compound in acetone.

This solution is then diluted with acetone so as to obtain the desired concentration of active ingredient.

The mixtures of active ingredients to be evaluated are a combination of the compound solutions prepared.

The test is set on Petri dishes on Potato Dextrose Agar. Test plates are prepared by injection of the acetone solutions in the culture medium.

Plates, used as controls, are amended with an acetone solution, which does not contain the active material.

After 24 hours, mycelium disks of 5 mm in diameter removed from the margin of a twelve days old culture of *Alternaria brassicae* are transferred mycelium surface downwards in the centre of the test plates.

Then radial growth of mycelium is measured after eleven to twelve days of incubation at 18-20°C and compared with control plates.

Efficacy in practice of both compounds and mixtures is calculated according to Abott formula. Theoretical efficacy of the mixtures is calculated according to Colby formula . A synergistic effect is detected if the efficacy in practice is superior to the theoretical efficacy.

Example B : Synergistic *In vitro* test on *Rhizoctonia solani*:

A solution of each active ingredient to be tested, at a concentration of 25 g/l, is prepared by solving the compound in acetone.

This solution is then diluted with acetone so as to obtain the desired concentration of active ingredient.

The mixtures of active ingredients to be evaluated are a combination of the compound solutions prepared.

The test is set on Petri dishes on Potato Dextrose Agar. Test plates are prepared by injection of the acetone solutions in the culture medium.

Plates, used as controls, are amended with an acetone solution, which does not contain the active material.

After 24 hours, mycelium disks of 5 mm in diameter removed from the margin of a 5 days old culture of *Rhizoctonia solani* are transferred mycelium surface downwards in the centre of the test plates.

Then radial growth of mycelium is measured after five days of incubation at 20°C and compared with control plates.

Efficacy in practice of both compounds and mixtures is calculated according to Abbott formula. Theoretical efficacy of the mixtures is calculated according to Colby formula . A synergistic effect is detected if the efficacy in practice is superior to the theoretical efficacy.

Alternaria brassicae

Evaluation of the synergistic effect with Colby Formula

Real efficacy (observed in the test)

		Iprodione in mg/l (ppm)						
		0	0.018	0.037	0.075	0.15	0.31	0.62
BAS 1901 in mg/l	0	0	31	25	22	28	63	87
	0.018	31		37	48			
	0.037	55		49	55	69		
	0.075	52			60	78	85	
	0.15	67				78	96	100
	0.31	70					99	100
	0.62	76						100
	1.25	78						100
								100

Calculated efficacy with Colby Formula

		Iprodione in mg/l (ppm)						
		0	0.018	0.037	0.075	0.15	0.31	0.62
BAS 1901 in mg/l	0							
	0.018			48.3	46.2			
	0.037			66.3	64.9	67.6		
	0.075				62.6	65.4	82.2	
	0.15					76.2	87.8	95.7
	0.31						88.9	96.1
	0.62							96.9
	1.25							98.5

Differences between observed and calculated efficacy

		Iprodione in mg/l (ppm)						
		0	0.018	0.037	0.075	0.15	0.31	0.62
BAS 1901 in mg/l	0							
	0.018			-11	2			
	0.037			-17	-10	1		
	0.075				-3	13	3	
	0.15					2	8	4
	0.31						10	4
	0.62							3
	1.25							

Rhizoctonia solani

Evaluation of the synergistic with Colby Formula

Real efficacy (observed in the test)

BAS490F in mg/l	D	Iprodione in mg/l (ppm)						
		0	0.018	0.036	0.072	0.144	0.288	1.25
0	0	0	-11	-5	-1	42	56	76
0.018	28			27	33			
0.036	32			35	35	43		
0.072	33				55	47	60	
0.144	36					59	64	80
0.288	47						62	81
0.62	45							81
1.25	38							95

Calculated efficacy with Colby Formula

BAS490F in mg/l	D	Iprodione in mg/l (ppm)						
		0	0.018	0.036	0.072	0.144	0.288	1.25
0	0							
0.018	28			24.4	27.3			
0.036	32			28.6	31.3	60.6		
0.072	33				32.3	61.1	70.5	
0.144	36					62.9	71.8	84.6
0.288	47						76.7	87.3
0.62	45							86.8
1.25	38							93.8

Differences between observed and calculated efficacy

BAS490F in mg/l	D	Iprodione in mg/l (ppm)						
		0	0.018	0.036	0.072	0.144	0.288	1.25
0	0							
0.018	28			3	6			
0.036	32			6	4	-18		
0.072	33				23	-14	-11	
0.144	36					-4	-8	-5
0.288	47						-15	-6
0.62	45							-1
1.25	38							1

Mixtures of iprodione + BAS490F**Tests on *Alternaria brassicae***

Active Ingredients	Concentrations (ppm)	Efficacy	Colby E (expected efficacy)	Conclusion
BAS490F (A)	0.31	70	89	SYNERGY
Iprodione (B)	0.31	63		
Composition A + B	A/B ratio is 1	E = 99		

Active Ingredients	Concentrations (ppm)	Efficacy	Colby E (expected efficacy)	Conclusion
BAS490F (A)	0.075	52	65	SYNERGY
Iprodione (B)	0.15	28		
Composition A + B	A/B ratio is 0.5	E = 78		

Active Ingredients	Concentrations (ppm)	Efficacy	Colby E (expected efficacy)	Conclusion
BAS490F (A)	0.15	67	96	SYNERGY
Iprodione (B)	0.62	87		
Composition A + B	A/B ratio is 0.24	E = 100		

Tests on *Rhizoctonia solani*

Active Ingredients	Concentrations (ppm)	Efficacy	Colby E (expected efficacy)	Conclusion
BAS490F (A)	0.075	33	33	SYNERGY
Iprodione (B)	0.075	0		
Composition A + B	A/B ratio is 1	E = 55		

Active Ingredients	Concentrations (ppm)	Efficacy	Colby E (expected efficacy)	Conclusion
BAS490F (A)	0.037	32	32	SYNERGY
Iprodione (B)	0.075	0		
Composition A + B	A/B ratio is 0.5	E = 35		

Active Ingredients	Concentrations (ppm)	Efficacy	Colby E (expected efficacy)	Conclusion
BAS490F (A)	0.018	28	28	SYNERGY
Iprodione (B)	0.075	0		
Composition A + B	A/B ratio is 0.24	E = 33		

Rhizoctonia solani

Evaluation of the synergistic effect with Colby Formula

Real efficacy (observed in the test)

		Iprodione in mg/l (ppm)						
		0	0.018	0.037	0.075	0.15	0.31	1.25
SSE 129 in mg/l	0	0	24	18	42	62	55	92
	0.018	36		58	54			100
	0.037	34		58	88	88		
	0.075	34			87	68	78	
	0.15	47				67	75	84
	0.31	46					78	91
	0.62	32						89
	1.25	34						100

Calculated efficacy with Colby Formula

		Iprodione in mg/l (ppm)						
		0	0.018	0.037	0.075	0.15	0.31	1.25
SSE 129 in mg/l	0							
	0.018			47.5	62.9			
	0.037			45.9	61.7	74.9		
	0.075				61.7	74.9	70.3	
	0.15					79.9	76.2	95.8
	0.31						75.7	95.7
	0.62							94.6
	1.25							100

Differences between observed and calculated efficacy

		Iprodione in mg/l (ppm)						
		0	0.018	0.037	0.075	0.15	0.31	1.25
SSE 129 in mg/l	0							
	0.018			10.5	-9			
	0.037			12.1	26.3	13.1		
	0.075				25.3	-6.9	7.7	
	0.15					-12.9	-1.2	-11.8
	0.31						2.3	-4.7
	0.62							-5.6
	1.25							0

Mixtures of iprodione + SSF129**Tests on *Rhizoctonia solani***

Active Ingredients	Concentrations (ppm)	Efficacy	Colby E (expected efficacy)	Conclusion
SSF129 (A)	0.075	34	62	SYNERGY
Iprodione (B)	0.075	42		
Composition A + B	A/B ratio is 1	E = 87		

Active Ingredients	Concentrations (ppm)	Efficacy	Colby E (expected efficacy)	Conclusion
SSF129 (A)	0.037	34	62	SYNERGY
Iprodione (B)	0.075	42		
Composition A + B	A/B ratio is 0.5	E = 88		

Active Ingredients	Concentrations (ppm)	Efficacy	Colby E (expected efficacy)	Conclusion
SSF129 (A)	0.037	34	75	SYNERGY
Iprodione (B)	0.15	62		
Composition A + B	A/B ratio is 0.25	E = 88		